

REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-4, 7, and 9-15 are pending in this application. Claims 16-27 and 29-31 have been cancelled. Claims 1, 2 and 9-15 are amended and no claims have been added. Claim 1 is the sole independent claim.

Rejections under 35 U.S.C. § 112

Claims 1-4, 7 and 9-15 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection for the reasons detailed below. Claim 1 has been amended to correct the antecedent basis of the term “spot arrays”. The Applicants, therefore, respectfully request that the rejection to Claims 1-4, 7 and 9-15 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Example Embodiments of the Present Application

Independent claim 1 recites analyzing the sample liquid, wherein flushing or reagent liquids are applied from above the substrate onto the spots of the spot arrays located on the substrate, and electrical measurements are carried out from below the substrate with the aid of contact elements. Example non-limiting embodiments of this feature are discussed, for example, in paragraph [0021] of the instant specification. With an electrical signal pick-up from a moving sequential arrangement of identical sensors on a belt, a measurement may be taken by picking up the signal on the underside of the substrate with the aid of contact elements. This allows faster analysis of foreign substances on pharmacological substances such as medicines.

Rejections under 35 U.S.C. § 103

Chateau in view of Chen and Gordon

Claims 1, 4, 9-11, and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chateau (US 4,071,315, hereinafter “Chateau”) in view of Chen et al. (US 2001/0051714 A1, hereinafter “Chen”) and in view of Gordon et al. (US 2001/0036641 A1, hereinafter “Gordon”). Applicants respectfully traverse this rejection for the reasons detailed below.

Applicants agree with the Examiner in that Chateau:

does not teach electrical measurements are carried out from below the carrier with the aid of contact elements, i.e., a tape having electrical contact elements.

(see page 4 of the Office Action).

The Examiner seeks to combine Chen and Gordon with Chateau in order to overcome the above-described deficiencies of Chateau. However, a cursory review of Chen reveals that Chen is similarly deficient in disclosing or suggesting the above-described deficiencies of Chateau. The Examiner states that Chen discloses “a substrate in the form of a flexible tape having spots of probes thereon, wherein the substrate comprises a metallic electrode layer, an alleged contact element, and the substrate has the added advantage of allowing the driving of probes (i.e., measurement spots) onto the tape, which aids in the synthesis of the measurement spots” (page 5 of the Office Action) substantially in the Abstract and paragraph [0017] and [0119] of Chen..

However, the Examiner further states, and Applicants agree, that Chateau and Chen still:

do not teach electrical measurements are carried out from below the carrier with the aid of contact elements, i.e., measurements with biochips are electrically readable.

(see page 5 of the Office Action).

Therefore, the Examiner seeks to combine Gordon with Chateau and Chen to overcome the deficiencies of Chateau and Chen. Gordon is directed to methods and devices for carrying out chemical reactions. The Examiner does not point out, nor can Applicants find, where Gordon discloses that the “contacts” 126, 128 and 130 are below a substrate. In fact, the Examiner has not shown where any substrate is located in Gordon.

Furthermore, the Examiner’s alleged motivation suggesting a problem to be solved is entirely unrelated to the problem be solved suggested by the instant specification. The Examiner states that one of ordinary skill in the art would have been motivated to modify Chateau and Chen in order to allow selective chemical activity at specific electrodes on the chip, contrary to the stated goal of allowing faster analysis of foreign substances on pharmacological substances such as medicines by carrying out electrical measurements from below the substrate with the aid of contact elements.

In view of the above remarks, Applicants respectfully submit that the combination of Chateau, Chen and Gordon cannot disclose or suggest “electrical measurements carried out from below the substrate with the aid of contact elements” as recited in independent claim 1.

The Applicants, therefore, respectfully request that the rejection to Claims 1, 4, 9-11 and 12-15 under 35 U.S.C. § 103(a) be withdrawn.

Claims 4, 9-11 and 12-15, dependent on independent claim 1, are patentable for the reasons stated above with respect to claim 1 as well as for their own merits.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claim 1 and all claims dependent thereon.

Chateau in view of Chen, Gordon and Chetverin

Claims 2-3 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chateau in view of Chen and in view of Gordon as applied to claim 1 above, and further in view of Chetverin et al. (US 6,103,463, hereinafter "Chetverin"). Applicants respectfully traverse this rejection for the reasons detailed below.

The Applicants incorporate the discussion provided above with respect to the teachings of Chateau in view of Chen and Gordon and maintain that no teaching or suggestion has yet been identified regarding electrical measurements being carried out from below the substrate with the aid of contact elements as is recited in independent claim 1. The Applicants, therefore, respectfully request that the rejection to Claims 2-3 and 7 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.


Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120.00 extension fee herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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